

Project #	Revised 9919	Project Title:	UW-Waukesha Northview Lecture Hall 133 and Classrooms
Department:	Public Works--Buildings	Sponsor:	UW-Waukesha
Phase:	Construction	Manager:	Richard A. Bolte, Dir.
Budget Action:	C-\$ Update	Date:	January 6, 2006, 10:58 AM

CAPITAL BUDGET SUMMARY					
Year	2003	2004	2005	2006	Total
Project Phase	Concept/Budget	Design	Design/Construct	Construction	Project
Expenditure Budget	\$5,000	\$25,000	\$490,000	\$64,000	\$584,000
Revenue Budget	\$0	\$0	\$0	\$0	\$0
Net County Cost	\$5,000	\$25,000	\$490,000	\$64,000	\$584,000
COST DOCUMENTATION			REVENUE		
Architect	\$45,000			State Funds	\$200,000
Construction	\$495,000				
Furnishings*	\$75,000				
Audio Visual Equip.*	\$125,000				
Contingency	\$44,000				
Total Project Cost	\$784,000			Total Revenue	\$200,000
*State Funded					
EXPENDITURE BUDGET	\$584,000			REVENUE BUDGET	\$0

Project Scope & Description

Northview Hall was built in 1966. The large lecture hall (133) and the adjoining classrooms, offices, and toilet rooms have not been significantly renovated since then. The fixed tables and seating in the lecture hall are outdated and worn and some chairs are unsafe. The flooring, ceiling tile and other finishes in the lecture hall are outdated and worn as well. State funds were used to install some multi-media equipment in the early 1990s, but this system is too old to work effectively with new technology and pedagogy. The floors, ceilings and room finishes in the three adjoining classrooms and twelve faculty offices are also outdated and worn. Finally, the toilet rooms next to the lecture hall and classrooms need to be updated to meet ADA standards. In sum, over 50,000 students have used this part of Northview Hall since 1966 and it is showing its age badly. The UW System has already allocated \$200,000 to purchase multi-media equipment and classroom and office furnishings for this project.

In 2004 the original scope was changed to include the adjoining toilet rooms. However, the cost estimates for this work exceeded the funds allocated for the project making it necessary to request additional funding to complete the original work. During the budget and concept phase of the project, the architect and the campus dean concluded that it would be much more cost effective to renovate the badly aging surrounding classrooms and offices now rather than in a future capital project. Additional funds are required to complete the work based on architects January 2005 estimate. Increases are due to tremendous worldwide demand of construction materials.

Location

UW-Waukesha – Northview Hall lecture hall, adjoining classrooms, offices and toilet rooms.

Analysis of Need

In addition to showing their age, the large lecture hall, adjoining classrooms and offices need to be renovated to allow faculty to use the latest advances in technology and pedagogy. Talk and chalk are no longer the main methods of instruction in colleges and universities. Effective instruction now requires the use of computers, video projection systems, internet access and a host of other technological innovations.

Alternatives

Do nothing.

Ongoing Operating Costs

Costs are expected to remain unchanged

Previous Action

Approved as a new project in 1999-2003 Capital Plan and as planned in subsequent Capital Plans.

Approved to include state equipment in 2001-2005 Plan.

Project #	Revised 9920	Project Title:	Lower Northview Hall Refurbishing
Department:	Public Works--Buildings	Sponsor:	UW-Waukesha
Phase:	Construction	Manager:	Richard A. Bolte, Dir.
Budget Action:	C-\$ Update	Date:	January 6, 2006, 10:58 AM

CAPITAL BUDGET SUMMARY					
Year	2003	2004	2005	2006	Total
Project Phase	Concept/Budget	Design	Design/Construct	Construction	Project
Expenditure Budget	\$75,000	\$140,000	\$2,320,000	\$252,000	\$2,787,000
Revenue Budget	\$0	\$0	\$0	\$0	\$0
Net County Cost	\$75,000	\$140,000	\$2,320,000	\$252,000	\$2,787,000
COST DOCUMENTATION			REVENUE		
Moveable Equipment*	\$397,572			State Funds	\$1,192,717
Special Equipment*	\$397,572				
Telecommunications*	\$397,573				
Architect	\$235,000				
Construction	\$2,321,000				
Contingency	\$231,000				
Total Project Cost	\$3,979,717			Total Revenue	\$1,192,717
EXPENDITURE BUDGET	\$2,787,000			REVENUE BUDGET	\$0
*State Funded					

Project Scope & Description

Northview Hall was built in 1966. The three biology laboratories and the adjoining classrooms, offices, and toilet rooms have not been significantly renovated since then. The biology labs are outdated and worn and too small to handle current enrollments and changes in pedagogy and instructional technology. The floors, ceilings and room finishes in the twelve adjoining classrooms and fourteen faculty offices are also outdated and worn. Finally, the toilet rooms in this area need to be updated to meet ADA standards. In sum, over 50,000 students have used this part of Northview Hall since 1966 and it is showing its age badly. The UW System has already allocated \$1.2 million to purchase laboratory and multi-media equipment and classroom and office furnishings for this project.

During the 2004 budget and concept phase, three work items were added to the project scope. These include: 1) The current and original windows and doors on the building are 38 years old and are not energy efficient. 2) The current/original HVAC system in Northview Hall is 38 years old and it is difficult to control and use efficiently. It is just two years from its projected life span. 3) The finishes to the offices within the renovation project are outdated and worn. Additional funds are required to complete the work based on architects January 2005 estimate. Increases are due to tremendous worldwide demand of construction materials.

Location

UW-Waukesha – Northview Hall lower level including three biology laboratories and adjoining classrooms, offices and toilet rooms.

Analysis of Need

In addition to showing their age, the biology labs, adjoining classrooms, and offices need to be renovated to allow faculty to use the latest advances in technology and pedagogy. Talk and chalk are no longer the main methods of instruction in colleges and universities. Effective instruction now requires the use of computers, video projection systems, Internet access and a host of other technological innovations. This is especially true in the sciences.

Alternatives

Lab and classroom modification monies have provided minor improvements, and the spaces need attention. The alternative is to ignore the need. This will create a situation where, especially for the biological sciences, curriculum is not taught using modern technology and concepts.

Ongoing Operating Costs

Costs are expected to remain unchanged.

Previous Action

Approved as a new project in the 1999-2003 Capital Plan and as planned in 2000-2004 Plan. Approved to include state equipment in 2001-2005 Plan and as planned in subsequent years.

Project #	200610	Project Title:	Substation Salt Mitigation
Department:	Public Works--Buildings	Sponsor:	DPW-Highway
Phase:	Design/Construct	Manager:	Richard A. Bolte, Dir.
Budget Action:	New	Date:	January 6, 2006

CAPITAL BUDGET SUMMARY			
Year	2006	2007	Total
Project Phase	Design/Construct	Construction	Project
Expenditure Budget	\$64,000	\$172,000	\$236,000
Revenue Budget	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Net County Cost	\$64,000	\$172,000	\$236,000
COST DOCUMENTATION		REVENUE	
Architect	\$32,000		
Construction	\$185,000		
Contingency	<u>\$19,000</u>		
Total Project Cost	\$236,000	Total Revenue	\$0
EXPENDITURE BUDGET	\$236,000	REVENUE BUDGET	\$0

Project Scope & Description

In light of salt-contaminated groundwater issues identified at the North Prairie Substation and upgrade work to be completed in 2005, Waukesha County plans to address repairs and upgrades to salt-contaminated storm water/wash water runoff collection systems at the other substations. By taking a proactive stance and addressing these issues now, we may be able to prevent future groundwater contamination problems at these sites. The plan includes installing new underground holding tanks for interior floor drain and truck washing wastewater, replacing underground storm water brine collection tanks and installing high-level alarms, and grading and resurfacing the concrete aprons in front of the salt domes. This work will assure that the substations remain in compliance with Wisconsin Administrative Code TR 277 Highway Salt Storage Requirements.

- New Berlin Substation (2006) \$23,600
 - Replace Garage Septic Holding Tank
 - Install New Salt Dome Brine Tank Hi-Level Alarm
 - Install an Apron Berm
- Sussex Substation (2007) \$56,600
 - Replace Existing Salt Dome Brine Tank
 - Remove and Replace the Salt Dome and Sand Mix Building Asphalt Apron
- Nashotah Substation (2007) \$79,100
 - Separate Garage Floor Drains from Septic/Install New Brine Tank
 - Replace Existing Salt Dome Brine Tank
 - Remove and Replace the Salt Dome and Sand Mix Building Asphalt Apron
- Highway Operations Center (2007) \$30,600
 - Install New Salt Dome Brine Tank Hi-Level Alarm
 - Remove and Replace the Salt Dome and Sand Mix Building Asphalt Apron
- North Prairie Substation (2007) \$27,100
 - Install New Salt Dome Brine Tank Hi-Level Alarm
 - Remove and Replace the Salt Dome and Sand Mix Building Asphalt Apron

Project #	200610	Project Title:	Substation Salt Mitigation
Department:	Public Works--Buildings	Sponsor:	DPW-Highway
Phase:	Design/Construct	Manager:	Richard A. Bolte, Dir.
Budget Action:	New	Date:	January 6, 2006

Location

New Berlin Substation
Sussex Substation
Nashotah Substation
Fleet Center
North Prairie Substation

Analysis of Need

The paved aprons outside the salt domes and sand mix buildings are generally in poor to moderate condition. There is typically substantial cracking present and settlement has sometimes occurred which results in storm water ponding. These conditions result in salt-containing storm water infiltrating to groundwater rather than being directed to the brine tanks. In addition, the pavement grading is sometimes insufficiently sloped to direct storm water to the brine tank inlets.

The brine tanks do not have high-level alarms to notify the facility operators when the tanks have reached the holding capacity. The likely result is significant loss of brine tank water through the brine tank inlet connections.

The maintenance garage floor drains at the North Prairie and Nashotah substations are directed to on-site septic systems. The salt-containing truck wash water enters the subsurface at these locations through the septic system infiltration beds.

The septic system holding tank at the New Berlin substation has failed, apparently due to corrosion from the salt-containing maintenance garage floor drain wash water.

Alternatives

An alternative would be to continue to operate the existing salt-contaminated stormwater/washwater runoff collection systems until ordered by the State Department of Transportation (Wisconsin Administrative Code TR 277) or Department of Natural Resources (NR 140) to make repairs and/or restore the environment. The County could be compelled to supply potable water to neighbors on private wells if groundwater contamination were found in the future. Adverse publicity might reinforce the opinion of community leaders that the County is a poor risk as a neighbor, especially if there is a perception that the upgrades were made at North Prairie only in response to evidence of contamination from the monitoring wells required by the Village.

Ongoing Operating Costs

On-going operating costs associated with this project are estimated to be \$4,000 per year for pumping and disposal of floor drain and truck wash wastewater collected in new underground holding tanks at two locations.

Previous Action

Added a holding tank at North Prairie substation.

Project #	200623	Project Title:	Courthouse AHU Replacement
Department:	DPW Facilities	Sponsor:	Public Works-Building Operations
Phase:		Manager:	Richard A. Bolte, Dir.
Budget Action:	New	Date:	January 6, 2006

CAPITAL BUDGET SUMMARY				
Year	2006	2007	2008	Total
Project Phase	Design	Construction	Construction	Project
Expenditure Budget	\$55,000	\$400,000	\$375,000	\$830,000
Revenue Budget	\$0	\$0	\$0	\$0
Net County Cost	\$55,000	\$400,000	\$375,000	\$830,000
COST DOCUMENTATION		REVENUE		
Architect	\$55,000			
Construction	\$720,000			
Contingency	<u>\$55,000</u>			
Total Project Cost	\$830,000	Total Revenue		\$0
EXPENDITURE BUDGET	\$830,000	REVENUE BUDGET		\$0

Project Scope & Description

The scope of the project is the design/engineering and replacement of twelve Air Handling Units in the Courthouse. Design to be completed in 2006 with the construction and installation to be completed in 2007 and 2008. To minimize the disruption to courthouse business activities the installation of the various air-handling units will need to be scheduled for the spring and fall.

Location

Waukesha County Courthouse 515 W. Moreland Blvd. Waukesha, WI 53188

Analysis of Need

The number one complaint on the 2003 & 2004 Customer Satisfaction Surveys from the staff in the courthouse has been temperature control. There are 23 Air Handling Units in the courthouse. This project is to replace the 12 air-handling units that were installed in 1959. The normal life expectancy of mechanical equipment is approximately 25 years. These units are 46 years old and have exceeded their life expectancy and are not reliable from the standpoint of operations, maintenance and energy efficiency. Due to their age and condition these units experience frequent breakdowns and are no longer capable of maintaining temperatures in the comfort zone.

The comfort zone is the range of temperature that the vast majority of people (not all) consider comfortable. Studies have shown that to maintain reasonable employee productivity levels temperatures should be maintained between 68 & 73 degrees with relative humidity levels between 45% & 55%.

There have been a number of renovation projects completed in the courthouse. The common thread in all of them has been that whenever one of these projects are completed that the AHU units did not supply the CFM capacity required to meet existing codes. During the second floor renovation of the Clerk of Courts offices two small AHU's # 22 & 23 were added to the project to supplement AHU's # 5 & 22 to meet the CFM requirements. The balancing report for AHU # 3 indicates that it is short on capacity, AHU #19 which is being replaced this year will be a larger unit than the existing one. AHU #20 is also short of capacity.

Project #	200623	Project Title:	Courthouse AHU Replacement
Department:	DPW Facilities	Sponsor:	Public Works-Building Operations
Phase:		Manager:	Richard A. Bolte, Dir.
Budget Action:	New	Date:	January 6, 2006

Air Handling Units to be replaced.

AHU #2 1959, CH ground floor west wing
 AHU #3 1959, CH 1st floor east wing
 AHU #4 1959, CH 1st floor west wing
 AHU #5 1959, CH 2nd floor east wing
 AHU #8 1959, CH Ground floor west wing
 AHU #10 1980, CH 1st floor west wing
 AHU #12 1959, CH 2nd floor west wing
 AHU #14 1959, CH 3rd floor east wing
 AHU #15 1959, CH 3rd floor near lobby
 AHU #16 1959, CH basement
 AHU #17 1959, CH basement
 AHU #18 1959, CH 1st floor west wing

Alternatives

Continue to experience equipment breakdowns that have negative impacts on the productivity of our staff and the services provided in the courthouse.

Ongoing Operating Costs

There will be some positive effect on operating costs because of higher efficiencies gained with new equipment. The existing motors are in the 70% to 80% range. The new high efficiency motors are 90%, so we should realize at least a 10% increase in electrical efficiency. There are also advances in coil technology that reduces the pressure drop across the coil, which in turn reduces the break horsepower requirements of the motor further reducing the electrical consumption. We will also see an increase in efficiency with new/clean thermal transfer surfaces.

From a labor standpoint the old equipment is quite labor intensive. Our mechanics spend too much time trouble shooting and adjusting this old equipment.

Previous Action

Air Handling Units #1, #7, #9, #11, and #13 were replaced in 1990. AHU #19 is being replaced in 2005 and AHU #20 is scheduled to be replaced in 2006.

Project #	200618	Project Title:	Data Center Relocation
Department:	Public Works--Buildings	Sponsor:	DPW & DOA Information Systems
Phase:		Manager:	Richard A. Bolte, Dir.
Budget Action:	New	Date:	January 6, 2006

Capital Budget Summary			
Year	2006	2008	Total
Project Phase	Short-Term Design/Construct	Long-Term Design	Project
Expenditure Budget	\$105,000	\$70,000	\$175,000
Revenue Budget	\$0	\$0	\$0
Net County Cost	\$105,000	\$70,000	\$175,000
COST DOCUMENTATION		REVENUE	
Short Term Design	\$5,000		
Short Term Construction	\$100,000		
Long Term Design	\$70,000		
Long Term Construction	TBD		
Total Project Cost	\$175,000	Total Revenue	\$0
EXPENDITURE BUDGET	\$175,000	REVENUE BUDGET	\$0

Project Scope & Description

It is recommended that this project be completed in two distinct phases. The first phase will include engineering services to select most cost effective three year solution. Options include 1) adding stand alone cooling units, 2) resizing oldest existing unit, 3) reworking airflow including removing ceiling and reworking ductwork. The second phase would be to design and construct a new data center at a site to be determined.

Location

Phase 1 - Waukesha County Courthouse, 515 W. Moreland Blvd. Room G93A

Analysis of Need

Waukesha County's Data Center has experienced significant growth in recent years. The County architecture has migrated from a mainframe-centric environment of several very large devices, to a large number of smaller, rack mounted units. At the same time, the amount of raw drive space has grown almost exponentially. The server racks/cabinets are very tall, bringing them close to the facility ceiling. All this has served to increase the heat load, while decreasing the air flow.

We have recently begun to run both air conditioners simultaneously. At this point, we have no fault tolerance for our air conditioning/air handling work load. It has been determined that a failure of one of the two current units will require the immediate execution of a shutdown process for all computer equipment located in the Courthouse Data center and would directly impact productivity of employees. The improper cooling of valuable computer equipment is an avoidable risk that needs immediate attention.

• Existing Data Center Problems:

- The cooling capacity of the redundant HVAC equipment is not able to meet the existing heat load.
- Ceilings are too low to provide adequate circulation of supply and return air creating hot spots.
- There is no fresh air supply to the room.
- The south and west walls contribute to the heat load.
- The raised floor is only 10" in height and with the amount of cabling and electrical wires under the floor there is insufficient area to distribute the conditioned air to the areas needed.
- The room is T shaped further complicating the distribution problems.
- There is no room for growth in the existing data center.
- There are some security concerns with the location of the existing data center.

• Benefits of a properly designed Data Center:

- Security of the facility could be made better.
- Would allow for future growth without other issues.
- Would meet all environmental code requirements.
- The old data center could be converted back into office space to address the space needs of the department.
- Would provide a 20 to 30 year solution.

Alternatives

1. Defer all equipment replacements and upgrades until HVAC upgrades can be completed.
2. Construct an entirely new Data Center.

Ongoing Operating Costs

First phase impact is to increase electrical operating costs. A second phase would take advantage of the most efficient technologies to reduce utility and operations costs.

Previous Action

None

Project #	HWY-9903	Project Title:	CTH Y, I-43 – CTH I
Department:	Public Works- Highway	Road Name:	Racine Avenue
Phase:	Design	Project Type:	Priority Corridor
Budget Action:	Delay Construction	Manager:	Richard A. Bolte, Dir.
Date:	January 6, 2006		

CAPITAL BUDGET SUMMARY							
Year	2004	2005	2006	2007	2008	2009	Total
Project Phase	Design	Land Acq.	Land Acq.	Land	Const.	Const.	Project
Expenditure Budget	\$595,000	\$700,000	\$2,100,000	\$5,950,000	\$2,000,000	\$2,034,000	\$13,379,000
Revenue Budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net County Cost	\$595,000	\$700,000	\$2,100,000	\$5,950,000	\$2,000,000	\$2,034,000	\$13,379,000
COST DOCUMENTATION				REVENUE			
Design	\$595,000						
Land Acquisition	\$3,150,000						
Construction	\$8,495,000						
Construction Management	\$785,000						
Contingency	\$354,000						
Total Project Cost	\$13,379,000			Total Revenue			
							\$0
EXPENDITURE BUDGET	\$13,379,000			REVENUE BUDGET			
							\$0

Project Scope & Description

This project involves the reconstruction of 2.0 miles of CTH Y to a multi-lane section from I-43 to CTH I. The use of a median or a two way left turn lane to provide for left turn movements will be evaluated during the design phase of this project. The roadway alignment will stay at its present location. Land will be acquired to a distance of 60 feet from the roadway centerline north of CTH ES and 55 feet from the roadway centerline South of CTH ES. There may be up to 10 potential business and residential relocations. This project will incorporate a grade separation and connecting ramp for the CTH ES & Y intersection and traffic signals at the intersection of CTH Y and CTH I. Construction scheduling coordination with WisDOT and City of New Berlin will be conducted to minimize traffic impacts due to projects proposed by the different agencies.

Location

City of New Berlin

Analysis of Need

CTH Y or Racine Avenue has been identified as a priority need for widening to 4 lanes by the Waukesha County Department of Public Works. This portion of CTH Y is also shown as a 4-lane roadway in the SEWRPC Jurisdictional Highway Plan for the year 2020 for Waukesha County. Traffic volumes recorded in 2003 along this portion of CTH Y are approximately 14,000 vehicles per day. The volumes indicate that the existing two-lane roadway is beyond its operating capacity of 13,000 vehicles per day, and is therefore in need of widening.

Alternatives

1. Do nothing. This alternative does not address the identified deficiencies.
2. Reconstruct CTH Y as described above.

Ongoing Operating Costs

Operating costs are expected to increase by approximately \$25,000 per annum for the additional lane miles and traffic signal.

Previous Action

Approved as new project in 1999-2003 Capital Plan. Approved as planned in the 2000-2004 Capital Plan. Approved with cost update in the 2001-2005 Plan. Approved as planned in the 2002-2006 Plan. Approved with change in scope in 2003-2007 Plan. Approved with cost updates in 2004-2008, 2005-2009 Plans.

Project #	HWY-9904	Project Title:	CTH X, STH 59 – Harris Highlands
Department:	Public Works- Highway	Road Name:	St. Paul Avenue
Phase:	Design	Project Type:	Priority Corridor
Budget Action	As Planned	Manager:	Richard A. Bolte, Dir.
Date:	01/06/2006, 11:05 AM		

CAPITAL BUDGET SUMMARY					
Year	2005	2006	2007	2008	Total
Project Phase	Design	Design	Land Acquis.	Construction	Project
Expenditure Budget	\$479,000	\$519,000	\$322,000	\$2,311,000	\$3,631,000
Revenue Budget	\$0	\$0	\$0	\$0	\$0
Net County Cost	\$479,000	\$519,000	\$322,000	\$2,311,000	\$3,631,000
COST DOCUMENTATION			REVENUE		
Design	\$1,119,000		STP - M		\$9,245,000
Land Acquisition	\$322,000				
Construction	\$10,120,000				
Construction Management	\$893,000				
Contingency	\$422,000				
Total Project Cost	\$12,876,000		Total Revenue		\$9,245,000
EXPENDITURE BUDGET	\$3,631,000		REVENUE BUDGET		\$0

Project Scope & Description

This 1.8 mile long project involves the reconstruction of CTH X to a multi-lane section. The roadway will have two driving lanes in each direction. The use of either a median or a two way left turn lane to provide for left turn movements will be evaluated during the design phase of the project. The roadway alignment may be moved slightly to reduce impacts on adjacent properties. Additional lands will be purchased to a distance of 65 feet from the roadway centerline. Intersections along CTH X will be improved to meet current and future traffic demands. Both the existing grade separation bridge over the Wisconsin Southern Railroad and the Bridge over Pebble Creek will be widened or possibly replaced to accommodate the additional traffic lanes. Approximately \$9,245,000 in Federal Aid will be required.

Location

Town of Waukesha/ City of Waukesha

Analysis of Need

CTH X or St. Paul Avenue has been identified as a priority need for widening to 4 lanes by the Waukesha County Department of Public Works. This portion of CTH X is also shown as a 4-lane roadway in the SEWRPC Jurisdictional Highway Plan for the year 2010 for Waukesha County. Traffic volumes recorded in 2003 along this portion of CTH X were approximately 16,000 vehicles per day. These volumes indicate that the existing two-lane roadway is beyond its operating capacity, which is 13,000 vehicles per day, and is therefore in need of widening.

Alternatives

1. Do nothing. This alternative does not address the identified deficiencies.
2. Reconstruct CTH X as described above.

Ongoing Operating Costs

Operating costs are expected to increase by approximately \$18,600 per annum for the additional lane miles.

Previous Action

Approved as new project in 1999-2003 Capital Plan. Approved as planned in the 2000-2004 Capital Plan. Approved with cost update in the 2001-2005 Plan. Approved as planned in the 2002-2006 Plan. Delayed 2 years in 2003-2007 Plan. Approved as planned in the 2004-2008 Plan. Approved with cost updates in 2005-2009 Plan.

Project #	HWY-9115	Project Title:	CTH Q, Colgate – STH 175
Department:	Public Works- Highways	Road Name:	County Line Road
Phase:	Constr./Implementation	Project Type:	Priority Corridor
Budget Action:	C-Scope	Manager:	Richard A. Bolte, Dir.
Date:	January 6, 2006		

CAPITAL BUDGET SUMMARY						
Year	2002	2003	2005	2006	2007	Total
Project Phase	Design	Land Acq.	Const. R/W, Design	Const.		Project
Expenditure Budget	\$844,000	\$353,000	\$5,200,000	\$7,170,000	\$0	\$13,567,000
Revenue Budget	\$0	\$0	\$800,000	\$0	\$0	\$800,000
Net County Cost	\$844,000	\$353,000	\$4,400,000	\$7,170,000	\$0	\$12,767,000
COST DOCUMENTATION			REVENUE			
Design	\$670,000		Agreement from			\$300,000
Land Acquisition	\$1,100,000		Washington County			
Construction	\$10,467,000		for Land and Const.			
Construction Management	\$900,000					
Contingency	\$430,000		CHIP D Funds			\$500,000
Total Project Cost	\$13,567,000		Total Revenue			\$800,000
EXPENDITURE BUDGET	\$13,567,000		REVENUE BUDGET			\$800,000

Project Scope & Description

This project involves the reconstruction of 3.3 miles of CTH Q to a multi-lane section with a grassed median to protect left turn movements. The roadway alignment will stay at its present location. Land will be acquired to a distance of 55 feet from the roadway centerline. The project will also construct approximately 1,000 feet of CTH Y in Washington County. Waukesha County will be reimbursed for this expense under a project agreement. The project will be built in two phases: phase 1 will be completed in 2005; phase 2 will be constructed in 2007. Public Works staff will complete final design for Phase 2 of the project in-house. Phase 2 includes the two to four lane reconstruction from CTH Y to CTH V and a two-lane rehab of the existing pavement from CTH V to Colgate Road.

Location

Village of Menomonee Falls, Town of Lisbon

Analysis of Need

CTH Q or County Line Road has been identified as a priority need for widening to 4 lanes by the Waukesha County Department of Public Works. This portion of CTH Q is also shown as a 4-lane roadway in the SEWRPC Jurisdictional Highway Plan for the year 2010 for Waukesha County. Traffic volumes recorded in 2003 along this portion of CTH Q are varying from 14,200 - 24,000 vehicle per day. These volumes indicate that the existing two-lane roadway is beyond its operating capacity, which is 13,000 vehicles per day, and is therefore in need of widening.

Alternatives

1. Do nothing. This alternate does not address the identified deficiencies.
2. Reconstruct CTH Q as described above.

Ongoing Operating Costs

Operating costs are expected to increase by approximately \$20,800 per annum for the additional lane miles.

Previous Action

Deleted in 1998-2002 Capital Plan. Approved as a "renew" project in 2000-2004 Plan. Approved with cost update and revised schedule in the 2001-2005 Plan. Approved with cost update in 2002-2006 Plan. Approved with an accelerated schedule in 2003-2007 Plan. Approved as planned in 2004-2008 Plan. Approved with cost update in 2005 - 2009 Plan.

Project #	HWY-200104	Project Title:	CTH O, CTH I to Hackberry Lane
Department:	Public Works – Highways	Road Name:	Moorland Road
Phase:	Design/Row Acq.	Project Type:	Rehabilitation
Budget Action:	As Planned	Manager:	Richard A. Bolte, Director
Date:	January 6, 2006		

CAPITAL BUDGET SUMMARY					
Year	2004	2005	2006	2007	Total
Project Phase	Design	Land Acq	Construction	Construction	Project
Expenditure Budget	\$400,000	\$125,000	\$4,125,000	\$1,100,000	\$5,750,000
Revenue Budget	\$0	\$0	\$0	\$0	\$0
Net County Cost	\$400,000	\$125,000	\$4,125,000	\$1,100,000	\$5,750,000
COST DOCUMENTATION			REVENUE		
Design	\$450,000				
Land Acquisition	\$75,000				
Construction	\$4,660,000				
Construction Management	\$355,000				
Contingency	<u>\$210,000</u>				
Total Project Cost	\$5,750,000		Total Revenue		\$0
EXPENDITURE BUDGET	\$5,750,000		REVENUE BUDGET		\$0

Project Scope & Description

Rehabilitate 4.35 miles of concrete pavement and asphalt/concrete roadway on CTH "O" from CTH "I" to STH 59 and 0.44 miles of concrete roadway on CTH "ES" just east and west of CTH "O". Reconstruct the 0.25-mile asphalt pavement portion of CTH "O" between STH 59 and Hackberry Lane. Opening a third driving lane to traffic between CTH "D" and STH 59 will be investigated as part of this project. Various rehabilitation techniques were investigated, including dowel bar retrofit, slab replacement, diamond grinding, concrete white-topping, asphaltic concrete overlay, etc. The selected concrete pavement rehabilitation will include concrete repairs, dowel bar retrofit, and diamond grinding. The selected asphalt pavement rehabilitation will include asphalt milling and resurfacing. Traffic signals will be updated or improved at various locations to accommodate the additional driving lanes and the proposed rehabilitation. Acquisition of right of way to the adopted ultimate width of 130 feet is not planned as part of this project. Some fee acquisition and grading easements may be needed to complete this project.

Location

City of New Berlin, City of Brookfield

Analysis of Need

The existing concrete pavement was rehabilitated in the early to mid-1990's using diamond grinding. The roadway exhibits cracked and broken slabs, joint faulting, and slab curl again resulting in a fair to poor ride. The pavement condition index ranges from 23 to 68 on this roadway. The average daily traffic (ADT) in 2004 ranges from 26,300 at the south end of the proposed project to 40,000 near the north end.

Alternatives

1. Do Nothing. This alternate does not address the identified deficiencies.
2. Rehabilitate the existing roadway.

Ongoing Operating Costs

Operating costs are expected to remain at approximately \$10,000 per annum.

Previous Action

Approved as a new project in the 2001-2005 Capital Plan. Approved as planned in the 2002-2006 Plan. Approved as planned in the 2003-2007 Plan. Delayed to 2006 and approved with cost update in the 2004-2008 Plan. Approved with cost update in the 2005-2009 Plan.

Project #	HWY-200420	Project Title:	CTH SR, Fox River Bridge & Appr.
Department:	Public Works- Highways	Road Name:	Springdale Road
Phase:	C - \$ Update	Project Type:	Bridge
Date:	January 6, 2006	Manager:	Richard A. Bolte, Director

CAPITAL BUDGET SUMMARY				
Year	2005	2006	2007	Total
Project Phase	Design	Right of Way	Construction	Project
Expenditure Budget	\$91,000	\$100,000	\$117,000	\$308,000
Revenue Budget	\$0	\$0	\$0	\$0
Net County Cost	\$91,000	\$100,000	\$117,000	\$308,000
COST DOCUMENTATION			REVENUE	
Design	\$91,000		Federal Bridge Aid	\$466,000
Land Acquisition	\$100,000			
Construction	\$503,000			
Construction Management	\$60,000			
Contingency	\$20,000			
Total Project Cost	\$774,000		Total Revenue	\$466,000
EXPENDITURE BUDGET	\$308,000		REVENUE BUDGET	\$0

Project Scope & Description

This project includes the replacement of the structure P-67-732 CTH SR bridge over the Fox River and reconstruction of its roadway approaches. The roadway will remain a two-lane facility and will be constructed to current standards. The bridge will be constructed to accommodate bicycles and pedestrians in accordance with the adopted Regional Bicycle and Pedestrian Facilities System Plan for Southeastern Wisconsin: 2010. A shift in roadway alignment may be necessary to accommodate the wider shoulders while avoiding stream relocation. Right of way will be purchased to a width of 50 feet from the roadway centerline. The project will receive an estimated \$466,000 in Federal Bridge Aid.

Location

City of Brookfield, City of Pewaukee

Analysis of Need

The existing bridge is two-span deck-girder bridge constructed in 1962. The ends of the pre-cast double tee girders are deteriorating, exposing tensioning strands. The loss of section has caused two girders to settle over the pier. Emergency repairs were made to the bridge in 2002. The structure sufficiency number is 38.4, which indicates that a structure replacement is warranted according to WisDOT guidelines, which state that a bridge should be replaced when the sufficiency drops below 50. The jurisdiction of this bridge transferred from the City of Brookfield to Waukesha County in 2000. The Fox River runs parallel to CTH "SR" for approximately three hundred feet at the site.

Alternatives

1. Do nothing. This alternative does not address the identified deficiencies.
2. Reconstruct the existing bridge and roadway approaches to current WisDOT standards.

Ongoing Operating Costs

Initial maintenance costs will be reduced.

Previous Action

Approved as new project in 2004-2008 Plan. Approved with cost update in 2005-2009 Plan.

Project #	200202	Project Title:	CTH H, Fox River Bridge
Department:	Public Works - Highways	Road Name:	River Road
Phase:	Formation	Project Type:	Bridge
Budget Action:	As Planned	Manager:	Richard A. Bolte, Director
Date:	January 6, 2006		

CAPITAL BUDGET SUMMARY			
Year	2006	2007	Total
Project Phase	Design	Construction	Project
Expenditure Budget	\$34,000	\$196,000	\$230,000
Revenue Budget	\$0	\$0	\$0
Net County Cost	\$34,000	\$196,000	\$230,000
COST DOCUMENTATION		REVENUE	
Design	\$34,000		
Land Acquisition	\$0		
Construction	\$168,000		
Construction Management	\$20,000		
Contingency	\$8,000		
Total Project Cost	\$230,000	Total Revenue	\$0
EXPENDITURE BUDGET	\$230,000	REVENUE BUDGET	\$0

Project Scope & Description

This project involves the rehabilitation of the existing bridge B-67-101, CTH "H" over the Fox River. The rehabilitation will include a bridge deck overlay, full depth deck repair at the deck edges, railing replacement, installation of approach guardrail, and replacement of riprap protection at the abutments. This project is not eligible for Federal Bridge Aid since the sufficiency number is not below 80.0.

Location

City of Waukesha/Town of Waukesha

Analysis of Need

The structural sufficiency number for this bridge is 83.0. The bridge deck is delaminated and spalling. The edges of the deck are spalling and the slope paving is eroded. The deck overlay will extend the life of the existing bridge deck and girders.

Alternatives

1. Do nothing. This alternative does not address the identified deficiencies at the intersection.
2. Rehabilitate the existing bridge to current WDOT standards.

Ongoing Operating Costs

Initial maintenance costs will be reduced.

Previous Action

Approved as new project in the 2002-2006 Plan. Approved as planned in the 2003-2007 Plan. Approved as planned in the 2004-2008 Plan. Approved as planned in the 2005-2009 Plan.

Project #	HWY-200625	Project Title:	CTH K, SR, Weyer Road Study
Department:	Public Works- Highway	Road Name:	Lisbon, Springdale, Weyer Roads
Phase:	Formation	Project Type:	Study/Conceptual
Budget Action:	New	Manager:	Richard A. Bolte, Dir.
Date:	January 6, 2006		

CAPITAL BUDGET SUMMARY				
Year Project Phase	2006 Study	2007	2008	Total Project
Expenditure Budget	\$200,000	\$0	\$0	\$200,000
Revenue Budget	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Net County Cost	\$200,000	\$0	\$0	\$200,000
COST DOCUMENTATION			REVENUE	
Design	\$200,000			\$0
Land Acquisition	\$0			
Construction	\$0			
Construction Management	\$0			
Contingency	<u>\$0</u>			
Total Project Cost	\$200,000		Total Revenue	\$0
EXPENDITURE BUDGET	\$200,000		REVENUE BUDGET	\$0

Project Scope & Description

This project will involve the study of three concepts:

1. Extension of CTH SR from Capital Drive to CTH K (Lisbon Road).
2. Grade separation structure of CTH K over the Canadian National Railroad line.
3. Closure of the Weyer Road/Canadian National Railroad.

The study will result with the development of conceptual plans and cost estimates for potential implementation for future capital projects.

Location

Town and City of Brookfield, Town of Lisbon and Pewaukee, and Village of Menomonee Falls

Analysis of Need

1. CTH SR Extension: This area of the county is in need of a continuous north – south route. The extension will provide an alternative route for the public and emergency vehicles.
2. CTH K Grade Separation: CTH K at has seen increased traffic and as a result significant delays and queuing occur at the railroad crossing.
3. Closure of Weyer Road: This is not a preferable railroad crossing, and Canadian National RR has indicated that with the CTH K grade separation, this crossing should be closed.

Alternatives

1. Do nothing. This alternate does not address the identified deficiencies.
2. Conduct the studies to identify potential concepts/alternatives and associated costs and impacts.

Ongoing Operating Costs

None

Previous Action

None

Project #	HWY-9131	Project Title:	Bridge Aid Program
Department:	Public Works - Highways	Road Name:	
Phase:	Program Project	Project Type:	Bridge
Budget Action:	AS Planned	Manager:	Richard A. Bolte, Director
Date:	January 6, 2006		

CAPITAL BUDGET SUMMARY							
Year	Previous	2006	2007	2008	2009	2010	Total
Project Phase							Project
Expenditure Budget	\$815,000	\$160,000	\$0	\$170,000	\$0	\$180,000	\$1,325,000
Revenue Budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net County Cost	\$815,000	\$160,000	\$0	\$170,000	\$0	\$180,000	\$1,325,000
COST DOCUMENTATION				REVENUE			
Previous	\$815,000						
2006 Appropriation	\$160,000						
2007 Appropriation	\$0						
2008 Appropriation	\$170,000						
2009 Appropriation	\$0						
2010 Appropriation	\$180,000						
Total Project Cost	\$1,325,000			Total Revenue			\$0
EXPENDITURE BUDGET	\$1,325,000			REVENUE BUDGET			\$0

Project Scope & Description

The program provides assistance to municipalities for the replacement of large drainage structures. The project normally provides 50% of the funding for engineering, design, and construction of town-, village-, or city-initiated projects that do not receive federal or state aid.

Location

Various

Analysis of Need

Wisconsin Statute 81.38 requires the County to fund half the cost of construction or repair of local bridge and culvert projects initiated by townships. Such projects arise during the course of the budget year and funds are distributed on the basis of requests received. Requests that exceed the remaining funding for one year are carried over to the next year. This funding program has historically been expanded to cover all municipalities.

Alternatives

Participation of the County is required by statutory mandate in townships.
The County could choose to withdraw participation on city and village bridges.

Ongoing Operating Costs

The projects do not require any expenditure of the Department's operating budget. Projects are reviewed by the engineering staff.

Previous Action

Approved as on going program project as planned in the 1996-2000 capital plan. Suspended funding in 1997-1999. Approved as planned in subsequent five-year plans. Approved with additional years in the 2001-2005 Plan and 2002-2006 Plan. Approved with additional years in the 2002-2006 Plan. Approved with additional years in the 2003-2007 Plan. Approved with additional years in the 2004-2008 Plan. Approved with additional years in the 2005-2009 Plan.

Project #	HWY-9715	Project Title:	Repaving 2002-2006
Department:	Public Works	Road Name:	
Phase:	Program Project	Project Type:	Repaving
Budget Action:	C - Scope	Manager:	Richard A. Bolte, Dir.
Date:	January 6, 2006		

CAPITAL BUDGET SUMMARY							
Year	2002	2003	2004	2005	2006	2007	2008
Project Phase							
Expenditure Budget	\$1,990,000	\$2,040,000	\$2,090,000	\$2,140,000	\$2,190,000		
Revenue Budget	<u>\$650,000</u>	<u>\$750,000</u>	<u>\$750,000</u>	<u>\$1,245,000</u>	<u>\$200,000</u>	<u>New project created</u>	
Net County Cost	\$1,340,000	\$1,290,000	\$1,340,000	\$895,000	\$1,990,000		
COST DOCUMENTATION				REVENUE			
			Hwy Paving				
			Paver Study UWW Pav. & shouldering			CHIP RevTransp Aids	
2002	\$20,000	\$50,000	\$1,920,000		2002	\$450,000	\$200,000
2003	\$20,000	\$50,000	\$1,970,000		2003	\$150,000	\$600,000
2004	\$20,000	\$50,000	\$2,020,000		2004	\$0	\$750,000
2005	\$20,000	\$50,000	\$2,070,000		2005	\$645,000	\$600,000
2006	\$20,000	\$50,000	\$2,120,000		2006	\$0	\$200,000
Total Project Cost	\$100,000	\$250,000	\$10,100,000	Total Revenue	\$1,245,000	\$2,350,000	
EXPENDITURE BUDGET			\$10,450,000	REVENUE BUDGET		\$ 3,595,000	

Project Scope & Description

The project involves the resurfacing of County Trunk Highways to remove distressed areas and provide an improved riding surface. It is the Department's goal to resurface approximately 20 miles of roadway, and to crush, relay and surface approximately 3 miles of roadway on a yearly basis. The project includes the cost of the ongoing Paver Inspection Program which determines the sections of highways to be repaved, the cost of shouldering, and the cost of the paving program at U.W. Waukesha.

Location

Various

Analysis of Need

The Department presently maintains about 365 centerline miles of asphalt-surfaced roadways on the County Trunk System and the parking lots at U.W. Waukesha. As asphalt pavements age the surface tends to rut and crack due to vehicle loads and weathering of the asphalt. The Department has initiated a pavement management program which uses the PAVER software system. The average pavement condition index (PCI) of asphalt pavements in 2003 was 73. Our goal is to achieve an average - and then maintain - PCI rating of 70 with less than 10% under a PCI of 40. Resurfacing projects take into consideration the PCI of the existing pavements and the classification of the road. The PCI ratings will be updated on a rolling three-year schedule.

Alternatives

1. Do nothing. This alternative will result in a deteriorated system requiring large expenditures of funds to reconstruct the deteriorated sections.
2. Spot repairs and patching. The result will be a slight delay in the deterioration of the system, but the eventual result will be the same as "do nothing".
3. Resurface roadways based on pavement conditions determined by the PAVER pavement management system and Department review.

Ongoing Operating Costs

The cost of maintaining a two-lane roadway in good condition is approximately \$5,800 per mile.

Previous Action

Approved as planned in the 2001-2005 Plan. Approved as planned in the 2002-2006 Plan. Approved as planned in 2003 -2007, 2004-2008, 2005-2009 Plans.

Project #	HWY-9817	Project Title:	Culvert Replacement Program
Department:	Public Works - Highways	Road Name:	Various
Phase:	Program Project	Project Type:	Bridge
Budget Action:	As Planned	Manager:	Richard A. Bolte, Director
Date:	January 6, 2006		

CAPITAL BUDGET SUMMARY							
Year	Previous	2006	2007	2008	2009	2010	Total
Project Phase							Project
Expenditure Budget	\$800,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$1,300,000
Revenue Budget	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Net County Cost	\$800,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$1,300,000
COST DOCUMENTATION				REVENUE			
Previous	\$800,000						
2006 Appropriation	\$100,000						
2007 Appropriation	\$100,000						
2008 Appropriation	\$100,000						
2009 Appropriation	\$100,000						
2010 Appropriation	<u>\$100,000</u>						
Total Project Cost	\$1,300,000			Total Revenue			\$0
EXPENDITURE BUDGET	\$1,300,000			REVENUE BUDGET			\$0

Project Scope & Description

Provide annual funding for a countywide culvert replacement program.

Location

Various

Analysis of Need

The Public Works Department replaces a number of culverts every year because of deterioration. This program is designed to address the larger culvert structures that require more extensive design and land acquisition, and have a higher construction cost. Generally the individual cost of the replacements is approximately \$50,000 and therefore they do not warrant a Capital Project, however when grouped together the yearly costs exceed \$100,000. Individual culvert locations are not normally known until the year they are to be replaced. We have averaged two culvert replacements per year under this program.

Alternatives

Schedule individual projects as the needs arise.

Ongoing Operating Costs

The projects do not require any expenditure of the Department's operating budget. Projects are reviewed by the engineering staff.

Previous Action

Project Approved as program project beginning in 1998-2002 Capital Plan. Projects constructed in 2000; Two sites on CTH "CW", one culvert of CTH "CI". Project constructed 2001; one culvert on CTH "JK". Projects constructed 2002; one culvert CTH "D", one culvert CTH "TT". Project constructed in 2004; one culvert on CTH "Z", two culvert sites currently under design; CTH BB", CTH "U". Approved as planned in the 2001-2005 Plan. Approved with additional years in the 2002-2006 Plan. Approved with additional years in the 2003-2007 Plan. Approved with additional years in the 2004-2008 Plan. Approved with additional years in the 2005-2009 Plan.

Project #	HWY-200427	Project Title:	Signals & Safety
Department:	Public Works-Highway	Road Name:	
Phase:	Program Project	Project Type:	Spot Improvement
Budget Action:	Places Named	Manager:	Richard A. Bolte, Dir.
Date:	January 6, 2006		

CAPITAL BUDGET SUMMARY						
Year	2006	2007	2008	2009	2010	Total
Project Phase						Project
Expenditure Budget	\$800,000	\$850,000	\$900,000	\$950,000	\$1,000,000	\$4,500,000
Revenue Budget	\$0	\$0	\$0	\$0	\$0	\$0
Net County Cost	\$800,000	\$850,000	\$900,000	\$950,000	\$1,000,000	\$4,500,000
COST DOCUMENTATION			REVENUE			
			FUNDING			
2006 Appropriation	\$800,000			2006	HES-not budgeted	\$190,800
2007 Appropriation	\$850,000			2007		
2008 Appropriation	\$900,000			2008		
2009 Appropriation	\$950,000			2009		
2010 Appropriation	<u>\$1,000,000</u>			2010		
Total Project Cost	\$4,500,000			Total Revenue		\$190,800
EXPENDITURE BUDGET	\$4,500,000			REVENUE BUDGET		\$0

Project Scope & Description

This program will address roadway safety needs in three specific areas; new traffic signal installation and improvements at intersections that meet the most warrants, existing signal upgrades, and roadway improvements at high crash site locations. In 2006, work under this program will include the following:

CTH I & Sunnyslope Road (new signals and roadway improvements)	\$165,000
CTH K & Brookfield Road (new signals and roadway improvements)	\$430,000
CTH ES & CTH NN (new signals and roadway improvements or round-about)	\$175,000
Adding LED indications at all existing signal faces (HES Funds)	\$ 30,000

Location

Projects will be located throughout the County Highway System. Projects will be place named in the budget year.

Analysis of Need

The County's population continues to increase. This fuels an increase in the number of vehicles on the roadways. As a result, there is an increasing need to install new traffic signals to reduce crash rates, delays and congestion. Some existing signals are more than 20 years old and at least need new features like turn arrows or pedestrian phrases. Some high crash site locations are not at intersections and need to be addressed with other techniques like roadway reconstruction.

Alternatives

Accept increasing numbers of vehicle delays and rising crash rates. Attempt to perform signal upgrades using maintenance funding. Watch the list of warranted signal locations grow longer. Encourage alternative forms of transportation including transit, bicycling and walking.

Ongoing Operating Costs

Approximately \$9,600 annually per new signal installation and additional lane miles.

Previous Action

Projects 9816 and 200203 approved in 2002-2006, 2003-2007 Capital Plans. Approved as combined program in 2004-2008 Plan. Approved as combined program in 2005-2009 Plan.

Project #	200501	Project Title:	Expo Center Compliance/Maintenance
Department:	Parks and Land Use	Sponsor:	
Phase:	Design/Construction	Manager:	Dale Shaver, Dir.
Budget Action:	As Planned	Date:	January 6, 2006

CAPITAL BUDGET SUMMARY					
Year	2003-2004	2005	2006	2007	Total
Project Phase	In-house Design	Construction	Construction	Construction	Project
Expenditure Budget		\$465,000	\$249,000	\$37,000	\$751,000
Revenue Budget		\$0	\$0	\$0	\$0
Net County Cost		\$465,000	\$249,000	\$37,000	\$751,000
COST DOCUMENTATION			REVENUE		
Architect	\$30,000				
Construction	\$655,000				
Contingency	\$66,000				
Total Project Cost	\$751,000		Total Revenue		\$0
EXPENDITURE BUDGET	\$751,000		REVENUE BUDGET		\$0

Project Scope & Description

This project compiles internal and consultant recommendations, which address the Expo Center's ADA compliance requirements, maintenance needs, energy efficiency recommendations, plumbing code updates, pavement management, safety and risk issues, and infrastructure repairs. The projects are segregated into an eleven-year plan by location and by project type.

The costs are further broken-down by project type:

ADA \$90,000, Grounds \$20,000, HVAC \$160,000, Maintenance \$230,000, Road/Lots \$60,000, Safety \$170,000, Structural \$21,000

Location

The locations identified in this project are the Arena building, Beef Barn, Dairy Barn, Forum building, Hog Barn, Horse Announcer's Stand, Horse Barn, Horse Rings, Storage Barn, and the pavement and sidewalks in the entire grounds.

Analysis of Need

The Arena building is 31 years old and portions of the Forum complex are over 35 years old. Many aspects of the facilities have safety compliance issues. The age of the facilities requires needed repair and renovation.

Alternatives

Eliminate buildings or rebuild new facilities.

Ongoing Operating Costs

The identified projects are necessary for routine maintenance and code compliance and have no direct correlation in additional revenue generation for the Expo Center. The energy efficiency updates are designed to lower utility costs. The routine maintenance activities are designed to prevent more costly repairs and maintenance.

Previous Action

Some code issues were addressed during the 2002 Expo Capital Project. This addressed ADA issues in the restrooms of the Arena building and asbestos in the Arena's furnace room.

Project #	PP-9703	Project Title:	Pavement Management Plan
Department:	Parks & Land Use	Manager:	Dale Shaver, Parks & Land Use Director
Phase:	Program Project		
Budget Action:	C-\$ Update	Date:	December 19, 2005

CAPITAL BUDGET SUMMARY							
Year	1997-2005	2006	2007	2008	2009	2010	Total
Program Project							Project
Expenditure Budget	\$2,690,000	\$400,000	\$486,200	\$400,000	\$400,000	\$400,000	\$4,776,200
Revenue Budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net County Cost	\$2,690,000	\$400,000	\$486,200	\$400,000	\$400,000	\$400,000	\$4,776,200
COST DOCUMENTATION				REVENUE			
1997-2005	\$2,690,000						
2006	\$400,000						
2007	\$486,200						
2008	\$400,000						
2009	\$400,000						
2010	<u>\$400,000</u>						
Total Project Cost	\$4,776,200						
				Total Revenue			\$0
				REVENUE BUDGET			\$0
EXPENDITURE BUDGET '06	\$400,000						

Project Scope & Description

The plan identifies Capital and Operational Projects over 15 years (1997-2012) to be accomplished in order to bring the pavement up to industry standards. The projects consist of soil borings, pavement pulverization, stabilization fabric, culverts, stone base and asphalt pavement construction. This plan adds the Exposition Center in the years 2006 and 2007 for pavement management.

Location

Various locations determined by pavement conditions.

Analysis of Need

The Pavement Management Plan identifies pavement conditions based upon the PASER rating system, with a 10 rating as No Maintenance Required, and a 1 rating as Failed. The facility scheduled for capital road and parking lot expenditure in 2006 and 2007 is at the Exposition Center. Improvements at the Exposition Center include rebuilding the main concrete stairs at the entrance to the Arena, expanding the west parking lot and paving exposition areas currently gravel west and north of the 4H Forum Building.

Alternatives

Spot repair with asphalt base patching and chip and seal road surface has been performed to maintain some function of the roadway. This could be continued on an annual basis, but will not achieve the desired surface performance. Reconstruction will be required eventually.

Ongoing Operating Costs

Maintenance of the existing road conditions requires frequent patching and chip and seal applications in order to provide usable conditions. Operating costs within the next 5 years will be minimal with the proposed pavement improvements.

Previous Action

Approved as a new program project in the 1997-2001 Capital Plan, continued in 1998-2002 Plan and 1999-2003 Capital Plan. Approved with a change in scope to include additional pavement in the 2000-2004 plan. Approved as planned in the 2001-2005 Plan, 2002-2006 Plan, and 2003-2007 Plan, 2004-2008 plan, and 2005-2009 Plan.

Project #	PLU-200324	Project Title:	Lake Country Trail – Phase III
Department:	Parks and Land Use	Sponsor:	
Phase :	Design	Manager:	James Kavemeier, Park Systems Manager
Budget Action:	C-\$ Update	Date:	December 20, 2005

CAPITAL BUDGET SUMMARY			
Year	2005	2006	Total
Project Phase	Design/Engineering	Construction	Project
Expenditure Budget	\$12,500	\$600,700	\$613,200
Revenue Budget	\$0	\$306,600	\$306,600
Net County Cost	\$12,500	\$294,100	\$306,600
COST DOCUMENTATION		REVENUE	
Design	\$12,500	Stewardship Development	\$306,600
Construction	\$577,700	Grant	
Contingency	<u>\$23,000</u>		
Total Project Cost	\$613,200	Total Revenue	\$306,600
EXPENDITURE BUDGET	\$613,200	REVENUE BUDGET	\$306,600

Project Scope & Description

The Lake Country Recreational Trail is an existing 8.5 mile non-motorized recreation trail which was planned in 1992-1993 and Phase I opened in 1994. Phase I begins at the Landsberg Center in the City of Waukesha and ends at Cushing Park in the City of Delafield. The original trail overall site development plan consisted of the development of a 14.5 mile recreation trail from Waukesha to Oconomowoc. The plan was divided into three phases of development. The Phase II development project consisted of the construction of approximately 1.2 miles of asphalt paved bike lanes and trail from Cushing Park in the City of Delafield to CTH"P" in the Town of Summit. Phase II will terminate near a trail head/restroom/shelter building and trail parking area. The Proposed Phase III would complete the Lake Country Recreational Trail by extending the trail from CTH"P" in the Town of Summit to Roosevelt Park in the City of Oconomowoc (4.8 miles). The City of Oconomowoc will provide a trailhead in Roosevelt Park, which has previously been approved. The City of Oconomowoc has also applied and received permission from WEPCO to use their utility easement for the paved recreational trail. Interstate partners, the developer of the Pabst Farms property, has also expressed interest in the recreational trail adjacent to their development. Construction of this phase would link county trail users to the Oconomowoc community trail system.

Location

The proposed project is located in the Town of Summit extending the trail from the end of phase II at CTH"P" to Roosevelt Park in the City of Oconomowoc.

Analysis of Need

The original trail site development plan, prepared in partnership with Southeastern Wisconsin Regional Planning Commission and the Town of Pewaukee, Town of Delafield, City of Delafield, Town of Summit, and City of Oconomowoc, identifies in the Waukesha County Park and Open Space Plan the need for a recreational trail in this area of Waukesha County. Public hearings and open houses held to solicit the input of public citizens identified the desire for this recreational trail.

Alternatives

1. Do nothing and terminate the Lake Country Recreation Trail at the Phase II trailhead at CTH"P". This would not complete the Lake Country Recreation Trail as originally planned or complete link to the City of Oconomowoc as requested by the City of Oconomowoc.
2. Use alternate route using existing roadways. This would be unsafe due to volume of traffic.

Ongoing Operating Costs

Annual operational and maintenance costs are estimated to cost \$1,000.00 per mile, or \$5,000 annually, of trail per year beginning in the year 2007.

Previous Action

Phase I of the Lake Country Recreational Trail exists and Phase II is approved for construction. Approved as new project in 2003-2007 plan and as planned in the 2004-2008 plan.

Project #	PP-200503	Project Title:	Muskego Park Maintenance Building
Department:	Public Works - Buildings	Sponsor:	Parks & Land Use
Phase:	Planning	Manager:	Dale Shaver – Parks & Land Use Dir.
Budget Action:	As Planned	Date:	December 20, 2005

CAPITAL BUDGET SUMMARY				
Year	2005	2006	2008	Total
Project Phase	Planning	Design	Construction	Project
Expenditure Budget	\$5,000	\$17,000	\$580,000	\$602,000
Revenue Budget	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Net County Cost	\$5,000	\$17,000	\$580,000	\$602,000
COST DOCUMENTATION			REVENUE	
Planning/Design	\$22,000			
Construction - Building	\$428,000			
Construction - Site Work	\$130,000			
Contingency	<u>\$22,000</u>			
Total Project Cost	\$602,000		Total Revenue	\$0
EXPENDITURE BUDGET	\$602,000		REVENUE BUDGET	\$0

Project Scope & Description

This project replaces an old metal shed used as the maintenance and park office since the late 1950's. The new facility would be approximately 3200 s.f. in size. This is similar to the size and appearance of the Fox River and Fox Brook Park maintenance buildings. This building would consist of a public park office and support areas, heated shop and storage, cold storage, fuel tanks, and service yard.

Location

Muskego Park, S83 W20370 Janesville Rd., Muskego, WI 53150 – adjacent to the existing park office and maintenance building.

Analysis of Need

Because of the age of the facility, poor energy efficiencies, and functionality, the maintenance building should be replaced. The building is not conducive to meeting with the park user. The main entrance serves as the park foreman's office, public meeting area, lunchroom for employees, minor storage area, and a small bathroom is off this room. The garage storage areas are poorly lit and have low ceilings limiting their usefulness.

Alternatives

Do not construct a new facility and remodel the existing facility to function better for the intended use. An addition would be required to enlarge the office and support areas. It is unlikely changes could be made to improve the garage area because of the metal wall construction. Therefore new construction is the best course of action.

Ongoing Operating Costs

Expected utility costs would be expected to decrease with a new energy efficient building.

Previous Action

Approved as new project in 2005-2009 plan.

Project #	PP-200504	Project Title:	Menomonee Park Maintenance Building
Department:	Public Works - Buildings	Sponsor:	Parks & Land Use
Phase:	Formation	Manager:	Dale Shaver – Parks & Land Use Dir.
Budget Action:	As Planned	Date:	December 20, 2005

CAPITAL BUDGET SUMMARY				
Year	2006	2007	2009	Total
Project Phase	<u>Planning/Design</u>	<u>Design</u>	<u>Construction</u>	<u>Project</u>
Expenditure Budget	\$5,000	\$17,200	\$635,000	\$657,200
Revenue Budget	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Net County Cost	\$5,000	\$17,200	\$635,000	\$657,200
COST DOCUMENTATION		REVENUE		
Planning/Design	\$22,200			
Construction - Building	\$457,600			
Construction - Site Work	\$152,400			
Contingency	<u>\$25,000</u>			
Total Project Cost	\$657,200	Total Revenue		\$0
EXPENDITURE BUDGET	\$657,200	REVENUE BUDGET		\$0

Project Scope & Description

This project replaces an old Military building constructed in the early 1950s that is used as the maintenance and park office. The new facility would be approximately 3200 s.f. in size. This is similar to the size and appearance of the Fox River and Fox Brook Park maintenance buildings. This building would consist of a public park office and support areas, heated shop and storage, cold storage, fuel tanks, and service yard.

Location

Menomonee Park, W220 N7884 Townline Rd., Menomonee Falls, WI 53151 – near to the existing park office and maintenance building.

Analysis of Need

Because of the age of the facility, poor energy efficiencies, and functionality, the maintenance building should be replaced. The building is not conducive to meeting with the park user. The main entrance requires the visitor to walk through the maintenance garage area to reach the park office. This area serves as the park foreman's office, public meeting area, and lunchroom for employees. The garage storage areas are poorly lit and have low ceilings limiting their usefulness.

Alternatives

Do not construct a new facility and remodel the existing facility to function better for the intended use. An addition would be required to create an apparent entrance for the office and support areas. It is unlikely changes could be made to improve the garage area because of the barrack type of wall construction. Therefore new construction is the best course of action.

Ongoing Operating Costs

Expected utility costs would be expected to decrease with a new energy efficient building.

Previous Action

Approved as new project in 2005-2009 plan.

Project #	200109	Project Title:	Implement HHS Automated System
Department:	DOA-Information Systems	Sponsor:	HHS-Don Maurer
Phase:	Design and Implementation	Manager:	Mike Biagioli
Budget Action:	C-Scope; \$ Update	Date:	December 20, 2005

CAPITAL BUDGET SUMMARY						
Year Project Phase	2001 Analysis	2002 Development and Implementation	2004 Implementation	2005 Implementation	2006 Completion	Total Project
Expenditure Budget	\$560,000	\$0	\$725,000	\$0	\$110,000	\$1,395,000
Revenue Budget	<u>\$560,000</u>	<u>\$0</u>	<u>\$725,000</u>	<u>\$0</u>	<u>\$110,000</u>	<u>\$1,395,000</u>
Net County Cost	\$0	\$0	\$0	\$0	\$0	\$0
COST DOCUMENTATION			REVENUE			
Software	\$725,000		State Funding (SACWIS) - 2006-\$50,000			\$180,000
Contract/Consulting Services	\$560,000		Capital Project Fund Balance			\$60,000
Contingency	<u>\$110,000</u>		Human Services Fund Balance			<u>\$1,155,000</u>
Total Project Cost	\$1,395,000		Total Revenue			\$1,395,000
EXPENDITURE BUDGET	\$1,395,000		REVENUE BUDGET			\$1,395,000

Project Scope & Description

This Capital Project's scope was changed to reflect a new objective for 2005. Information Systems, working with Human Services has realized that the complexity of interfacing the in house developed PeopleLink system with Creative Socio-Medics Avatar PM product has emphasized the problem of maintaining a custom in-house systems, and trying to interface that system with purchased packaged solutions. While the ultimate goal is to provide Health and Human Services with an integrated solution that ties all functions together, continuing with the ongoing support of the PeopleLink system will continue to put a high burden on Information Systems staff and other resources. The best course of action is to redirect the dollars allocated to the purchase and implementation of an automated Case Management system to initially complete an in depth analysis of the correct direction to be followed to complete the automation effort for Health and Human Services. Critical to the analysis is taking into consideration that this could involve the replacement of PeopleLink. This analysis will result in a clearly defined project plan for the future completion of this initiative. The Case Management and Special Living Fund software solutions will be deferred until after the analysis effort is completed and the long-term project plan has been developed and accepted by all parties.

The 2006 funding requested for this Capital project is to allow the completion of phase 2 of the WiSACWIS to PeopleLink Interface. Project work completed includes automating the Intake and Client Tracking System (PeopleLink), automating the A/R billing, integrating a package solution with the business environment, completing the HIPAA compliance requirements, and State SACWIS integration.

Location

Health and Human Services, will be the major benefactors of this effort.

Analysis of Need

1. The required modifications to PeopleLink, to properly interface with WiSACWIS, HRIS, and the avatar PM module has greatly exceeded Information Systems originally estimates. This situation is not expected to diminish and is actually anticipated to grow in complexity as additional automated functions are added to support Health and Human Services.
2. The basic in house knowledge, although well documented, will continue to require significant attention by the Information Systems staff that is assigned to support Health and Human Services. This will hinder knowledge sharing and increases the risk of lost knowledge and productivity, in the event one of those staff members leaves the county.
3. Automation of the business process supporting the Department of Health and Human Services has been a stated objective for the County for over 15 years.
4. Phase 2 of the WiSACWIS Interface initiative will allow for the fully automated interchange of WiSACWIS data from PeopleLink to the State WiSACWIS system (CIA), and the reverse interface of all WiSACWIS information into PeopleLink (CMI).

Project #	200109	Project Title:	Implement HHS Automated System
Department:	DOA-Information Systems	Sponsor:	HHS-Don Maurer
Phase:	Design and Implementation	Manager:	Mike Biagioli
Budget Action:	C-Scope; \$ Update	Date:	December 20, 2005

Alternatives

Alternatives to this project include:

1. Continue using the current partially automated process that is in place.
2. Develop the system in-house using a combination of County Information Systems staff and contracted services.

Ongoing Operating Costs

An estimate of on-going operational costs for the maintenance component for the Avatar PM module will be \$38,250 in 2005. Additionally, the State of Wisconsin will charge the County an annual fee of approximately \$60,000 for the maintenance of the State WiSACWIS system, beginning in 2005 and expected to continue into 2006.

Previous Action

Approved as new project in 2001-2005 Plan. Approved with change of scope in 2003-2007 Plan. Completed in 2001-2005.

Project #	RM_200027	Project Title:	Electronic Document Management System
Department:	DOA-Records Mgmt.Div.	Manager:	Sean Sander
Phase:	Planning & Implementation	Manager:	Mike Biagioli
Budget Action:	As Planned	Date:	December 20, 2005, 10:02 AM

CAPITAL BUDGET SUMMARY							
Year	2001	2002	2003	2004	2005	2006	Total
Project Phase	Implement	Implement	Implement	Implement	Implement	Implement	Project
Expend. Budget	\$260,000	\$400,000	\$280,000	\$200,000	\$195,000	\$90,000	\$1,425,000
Rev. Budget	\$0	\$0	\$0	\$0	\$195,000	\$90,000	\$285,000
Net County Cost	\$260,000	\$400,000	\$280,000	\$200,000	\$0	\$0	\$1,140,000
COST DOCUMENTATION				REVENUE			
Hardware, Supplies Maintenance			\$259,465		Record Management		
Software, Licenses Maintenance			\$169,745		Fund Balance		\$285,000
Professional Services			\$143,055				
Conversions			\$852,735				
Total Project Cost			\$1,425,000		Total Revenue		\$285,000
EXPENDITURE BUDGET			\$1,425,000		REVENUE BUDGET		\$285,000

Project Scope & Description

This project adds and expands imaging applications throughout the County in DOA Finance (BAS Accounts Payable), Corporation Counsel (Legal and Child Support), Probate (case files), Juvenile (case index cards), Family and Criminal/Traffic (case index cards), District Attorney – Felony and Misdemeanor case files, Health & Human Services – case files, Parks & Land Use (Environmental, Planning and Land Information Systems), Sheriff's (Jail Registers, Incident Reports and Accident Reports). Several of these applications are now, or soon will be Web-based, providing records access where required to the general public, or shared access within the confines of the County. The Versatile for Windows has been upgraded to Versatile Enterprise to meet the County's records retention needs, because the existing software will be phased out. Versatile Enterprise offers the County-wide document retention system, which may be interfaced with Novell GroupWise, the County's existing e-mail system, and Optika, the County's existing imaging system, to provide consistent retention scheduling regardless of media type. Some of the imaging applications already in place, and some of those being proposed, provide easy access 24/7 to County staff. Some will also provide 24/7 access to the County's constituents.

Location

On a case-by-case basis, workstation-imaging hardware will be located in DOA-Records Management and/or the respective department/divisions. However, the system administration hardware (i.e. juke boxes, servers, etc) resides in the Records Management Division. DOA-Records Management staff in cooperation with DOA-Information Systems will administer the imaging application software.

Analysis of Need

Converting paper document into electronic images provides users with a more time efficient records management tool to store, retrieve, display, and disseminate information within an organization.

Alternatives

- 1) Increase staff to handle manual filing duties as more records are filed with the County, which will lead to increased salary and benefit costs to the County.
- 2) Provide filing systems, space, equipment, and supplies to retain the ever-increasing number of County records, which will lead to labor-intensive filing systems, reduction of active workspace, and increase equipment and supply costs.

Project #	RM_200027	Project Title:	Electronic Document Management System
Department:	DOA-Records Mgmt.Div.	Manager:	Sean Sander
Phase:	Planning & Implementation	Manager:	Mike Biagioli
Budget Action:	As Planned	Date:	December 20, 2005, 10:02 AM

Ongoing Operating Costs

Imaging annual hardware maintenance = \$20,196 for 2 high volume scanner/microfilers (120 ppm), \$3,105 for 1 optical disk jukebox (9.1 GB) and external drive; \$5,080 for 1 optical disk jukebox (2.6 GB) and external drive. Imaging annual software maintenance = \$27,900 for concurrent licenses (105 licenses), \$4,900 for County-wide site seat licenses (unlimited licenses); \$2,010 for scanning software (2 licenses); \$3,345 for indexing software (2 licenses); and \$735 for document export software. Most of these costs are included in the DOA - Records Management operating budget, but the concurrent and site license fees are passed on to the user departments by means of inter-department charges on an annual basis.

Previous Action

Optika imaging applications were installed in Register of Deeds (Real Estate and Vital Statistics Divisions), Parks & Land Use (Environmental Division and Land Information Systems), Corporation Counsel (Child Support and Legal Divisions) Sheriff (Jail and Administration), District Attorney, Probate, Clerk and Courts (Family, Criminal/Traffic Divisions), Juvenile, COLD (Computer output to Laser Disk), and County-wide for BAS accounts payable invoices. In future years, imaging projects will be added or expanded in other departments and/or divisions. DOA – Records Management previously implemented Versatile for Windows records management software for tracking inactive records at the County Records Center, and maintaining County records retention schedules. The records management software will be able to track electronic records with the recent upgrade to Versatile Enterprise within the next two years. Completed upgrade of imaging and scanning software, and replaced optical disk jukebox. Also, completed media migration of images (transfer from a lower capacity, obsolete optical disks to higher capacity optical disks) for Register of Deeds/Vital Statistics. Approved as planned in the 2001-2006 Plan. Approved with cost update in 2003-2007 plan.

Project Phasing

- 2001 **Completed**
- 2002 **Completed**
- 2003 **Completed - Plan and Implement imaging systems** for District Attorney, Sheriff's, Probate, and pilot a **Web-based imaging application** in the Environmental Division of Parks and Land Use. **Start backfile conversion imaging project** for Probate. **Upgrade records management software** from Versatile for Windows to Versatile Enterprise for DOA-Records Management. **Add, test, and begin to implement Web Module** for Versatile Enterprise records management software. **Piloting a touch screen application** in the Vital Statistics Division of the Register of Deeds for easy access by the general public to birth, death and marriage recorded certificates.
- 2004 **IN PROGRESS - Add** a scanner/microfilmer and a larger capacity optical disk jukebox. **Add, test, and begin to implement** Electronic Functions, the electronic records management module, to the Versatile Enterprise records management software. **Upgrade** the Optika imaging software to version 3.0. **Convert to web-based imaging** for the applications already in place in the Register of Deeds, Sheriff and District Attorney offices. **Organize, research and develop a County-wide Electronic Records Management Program** in conjunction with County's approved Record Retention Schedules to insure countywide continuity with appropriate retention and disposition of electronic records. Continue the backfile imaging projects in Probate Sheriff's and District Attorney's offices.
- 2005 **Plan and implement imaging systems** for the Mental Health Division of HHS. **Backfile conversion imaging project** for the Mental Health Division. **Add other Web-based applications** on an as needed basis.
- 2006 **Continue backfile conversion imaging projects** with those already in progress.

Project #	DOA-200327	Project Title:	Upgrade Collections (CUBS) System
Department:	DOA-Collections	Sponsor:	DOA
Phase:	Implementation	Manager:	Sean Sander, Business Services Manager
Budget Action:	C-Scope; \$Update	Date:	December 20, 2005, 10:03 AM

CAPITAL BUDGET SUMMARY				
Year	2003	2004	2006	Total
Project Phase	<u>Design</u>	<u>Implementation</u>	<u>Integration</u>	Project
Expenditure Budget	\$25,000	\$250,000	\$45,000	\$320,000
Revenue Budget	<u>\$25,000</u>	<u>\$250,000</u>	<u>\$45,000</u>	<u>\$320,000</u>
Net County Cost	\$0	\$0	\$0	\$0
COST DOCUMENTATION		REVENUE		
Consulting Services/Project Mgmt Ser	\$95,000	Collections Fund		
Hardware/Software	\$195,000	Balance Transfer		\$320,000
Training	\$15,000			
Contingency	<u>\$15,000</u>			
Total Project Cost	\$320,000	Total Revenue		\$320,000
EXPENDITURE BUDGET	\$320,000	REVENUE BUDGET		\$320,000

Project Scope & Description

The existing collection software system was acquired from Columbia Ultimate Business Systems (CUBS) in 1994. This project represents the planned future replacement and upgrade of the current system with CUBS's new Aliant product which is the foundation for their new generation of collection software products. This project supports the County's planned migration away from the universe database to one of the County's standard databases (Oracle or Microsoft's MS/SQL Server), a more current operating system and a faster machine. This environment would support interfaces with other County applications. This project includes \$40,000 for an electronic interface between DHHS's Avatar billing system and CUBS, which will significantly reduce the amount of manual work in referring delinquent accounts and in turn increase the timeliness of the referrals. This project is dependent and may be slightly delayed based on the vendor's staged development of the new product and the County migrating only upon equal or enhanced functionality.

Location

A dedicated server located in Information System will be acquired. The software will be administered by DOA-Collections with support from the vendor. Information Systems will provide network support.

Analysis of Need

Collection division staff will benefit from the enhanced functionality of the software. Internal and external users of the Collection Division will also benefit from the increased productivity associated with a faster machine. Purchase/implementation of this new collection software will enable Information Systems to discontinue support of the current universe database environment.

Alternatives

Alternatives to this project include:

1. Do nothing. Continue using our existing software in a universe environment with slower processing.
2. Terminate our relationship with CUBS and purchase a collection software package from a less experienced vendor. Our current vendor is the leading provider of collection software services and is the only known provider of collection software specifically designed for government use. Changing vendors would require costly custom programming and significant staff resources for data conversion and transition.

Ongoing Operating Costs

Software maintenance/license fees are expected to be 15-20% of the software purchase price or \$22,500-\$30,000 starting in 2005.

Previous Action

Approved as a new project in 2003-2007 Plan.

Project #	IS-200413	Project Title:	CITRIX Server Expansion
Department:	DOA-Information Systems	Sponsor:	DOA
Phase:	Testing and Implementation	Manager:	Mike Biagioli
Budget Action:	C – Scope and \$ Update	Date:	December 19, 2005

CAPITAL BUDGET SUMMARY				
Year	2004	2005	2006	Project Total
Project Phase	Analysis & Installation	Implementation	Completion	
Expenditure Budget	\$150,000		\$0	\$145,000
Revenue Budget	<u>\$150,000</u>		<u>\$0</u>	<u>\$150,000</u>
Net County Cost	\$0	\$0	\$145,000	\$145,000
COST DOCUMENTATION		REVENUE		
Hardware	\$200,000	End User Operations &		\$150,000
<u>Contract Services</u>	<u>\$95,000</u>	Technology Fund Balance		
Total Project Cost	\$295,000			
EXPENDITURE BUDGET	\$295,000	REVENUE BUDGET		\$150,000

Project Scope & Description

The County has had a CITRIX server environment since 1999. Over the past two years, Information Systems has been testing the CITRIX environment as a possible production environment to significantly enhance the computing capacity for desktop applications for the County. The County now provides remote computing access, using the CITRIX server environment to support the Parks & Land Uses CLASS system, Senior Services SAMS system, and the Ceridian Payroll HRIS system. Using remote dial-in and Virtual Private Network technology, the CITRIX server environment provides users with high-speed system access to a full suite of County applications, in a very secure Firewall topology.

This experiment in the use of the CITRIX server environment has proven to be very successful. The intent of this Capital program is to expand the production use of the CITRIX server environment to include a majority of applications that are currently supported by our desktop PC infrastructure.

Several successful deployments utilizing the CITRIX Server environment have pointed out that expanded usage can further offset expenses in several areas. Additional dollars are required for the Capital Project to fund contract services, servers, licenses and devices.

When this initiative is complete, all future expansion of CITRIX for the county will come directly from the End User Operations Technology Fund (EUOTF) as replacement costs.

Location

All departments that are candidates for the introduction of the CITRIX environment replacement for desk top PCs.

Analysis of Need

1. Information System's need for Desk Top support has grown over the past 5 years and will continue to grow unless a different technological infrastructure is put in place to reduce this need.
2. Security continues to be a major concern for the County. This is especially true with the introduction of the HIPAA Act. Security requirements will have to be in place during 2005.
3. Software licensing compliance will be greatly enhanced with the installation of this technology.

Alternatives

Continue to use the current desktop PC Environment.

Fiscal Impacts

The implementation of this CITRIX server environment should result in the following impacts on EUOTF funds:

	<u>Amount</u>	<u>Year of Impact</u>
Estimated annual EUOTF Impacts		
Reductions	\$85,000	2006
	\$100,000	2008
Increases		
License Maintenance	\$7,500	2006
License Maintenance	\$18,000	2008
Hardware	\$700	2006
	\$50,000	2008

Previous Action

Previously proposed as part of the 2004 – 2008 plan.

Project #	IS-200206	Project Title:	Fiber and Wireless to County Facilities
Department:	County-wide	Sponsor:	DOA
Phase:	Design	Manager:	Mike Biagioli
Budget Action:	C - Scope & \$ Update	Date:	December 19, 2005

CAPITAL BUDGET SUMMARY								
Year	2002	2003	2004	2005	2006	2007	2008	Total
Project Phase	Design	Development	Installation	Integration	Design	Installation	Completion	Project
Expenditure Budget	\$200,000	\$210,500	\$350,000	\$50,000	\$150,000	\$0	\$0	\$960,500
Revenue Budget	<u>\$200,000</u>	<u>\$210,500</u>	<u>\$350,000</u>	<u>\$50,000</u>	<u>\$150,000</u>	<u>\$0</u>	<u>\$0</u>	\$960,500
Net County Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
COST DOCUMENTATION				REVENUE				
	Non Grant	Grant	Total	End User Operations Technology Fund				
Hardware/Software	\$525,000	\$ 500,000	\$1,025,000	Balance Transfer 2002-2005				\$810,500
Cabling	\$260,000	\$ 300,000	\$560,000	Grant Funding Applied for. Project will not proceed without grant.				
Consulting Services	\$ 25,500	\$ 100,000	\$125,500					
Contingency	\$ -	\$ 100,000	\$100,000					
Total Project Cost	\$810,500	\$1,000,000	\$1,810,500					
2006 Grant Match-Requires Grant Approval for expenditure	<u>\$150,000</u>							
	\$960,500							
EXPENDITURE BUDGET				REVENUE BUDGET				

Project Scope & Description

In 2004, Information Systems Completed the Installation of the Secondary Storage Area Network (SAN) environment, located at the new Waukesha County Communication Center's computer facility.

This initiative now has the opportunity to afford the County to move technology forward as well as foster an opportunity to evolve interoperability between county municipalities as well as set the foundation for data sharing with other counties within the region, as well as preparing the county for wireless broadband capability.

In order to prepare Waukesha County for the deployment of a full wireless broadband access, several components of the infrastructure need to be added. The components can be added in an incremental process.

- 1.) The county fiber infrastructure needs to be upgraded to allow for a secondary loop that connects the Waukesha County Communications Center with the transmission tower on Davidson Road. An alternate path for this fiber would extend from the WCC to the east, allowing the County Airport facility to now attach directly to the county network. It would run from there along the most optimal path to the Radio Tower.
- 2.) The infrastructure that would become the backhaul for the data link (needed to support wireless broadband) would then be engineered to maximize the coverage of the most populated area of the county and allow for a link between Waukesha County and Milwaukee County.
- 3.) The integration of evolving technologies will allow for the minimization of costs required for fiber infrastructure. This would be part of the overall planning process that would incorporate all Waukesha County municipalities wishing to participate in the effort, as well as allow for the incorporation of shared services with and between Waukesha and Milwaukee County, as well as other Southeastern Wisconsin counties wishing to share in the process.

Since Wisconsin statute precluded local governments from owning community based fiber or broadband broadcast infrastructure, a relationship with a nonprofit 4.01.c3 dedicated to the development, maintenance, and economic development for such an initiative should be contracted with to insure the overall viability of such an effort.

The technologies to be considered, at this time, would be; Fiber Optic cable, Wi-MAX transmission and receiving, WiFi transmission and receiving.

This additional infrastructure is to be funded through a COPs grant submitted in conjunction with Milwaukee County, Ozaukee County, Racine County, and the City of Milwaukee. This grant requires a 25% match by the participating entities. At this time, this additional initiative (for 2006 and 2007) will not be activated without the grant funding approval. The time frame for the Federal approval of COPs Grant requests is the Fall of 2005.

Project #	IS-200206	Project Title:	Fiber and Wireless to County Facilities
Department:	County-wide	Sponsor:	DOA
Phase:	Design	Manager:	Mike Biagioli
Budget Action:	C - Scope & \$ Update	Date:	December 28, 2005

Location

All departments reliant on business continuity will benefit from this project. Major benefits will also be achieved for the Department of Emergency Preparedness, Parks & Land Use, Sheriff's Department, and the Department of Health and Human Services.

Analysis of Need

1. As part of the County's commitment to our partners in the Countywide Dispatch initiative, system reliability and recoverability are key components. Although the likelihood of a terrorist attack or a complete systemic failure is relatively low, the opportunity does still exist. This project should dramatically erase any and/or all objections to the County's preparedness for these types of failures.
2. With the ever expanding data storage needs within the County, and the anticipated high volumes of storage requirements for Dispatch system that will be servicing multiple agencies across Waukesha County, the addition of a second SAN environment will ease the impact on the SAN located in the Courthouse Computer room, provide instant recoverability of mirrored data, and allow for much faster establishment of business capability in the event of a Business Continuity event that requires the activation of the plan.
3. The lack of redundancy, for the fiber infrastructure, from the Waukesha County Communications Center to the Public Safety broadcast facility on Davidson Road leaves the Computer Aided Dispatch system vulnerable to the single path fiber optic cable being cut. There is a T1 emergency backup, in the event this does happen, but the secondary loop would eliminate the need for the T1 link and insure that the capacity needed for transmission is not hamstrung by the limited capacity of a T1 line.
4. Wireless broadband for Public Safety will become a growing standard in the near future. With the advent of the state WIJIS web-based information system, officers in their cars will expect broadband capacity to be able to access this information, using browser technology on their MDC units. Broadband capacity will be required.
5. Data sharing opportunities, with other counties and municipalities will require an infrastructure engineered to allow for the capacity this type of business interaction will require.
6. The economic development opportunities to Waukesha County businesses will demand that a tight partnership between local government and businesses be in place. There is no way that local government can solely fund this type of project, but a business alliance between regional local governments and companies within the same region can only be a win-win for all involved.
7. County faculties that are currently linked by telephone lines (T1, ISDN) could be converted to wireless links.
8. Broadband links to Waukesha County municipalities would eliminate the need for telephone WAN links, allowing all municipalities to be linked to the county using a high bandwidth vehicle. Allowing these municipalities to eliminate the costs of this phone line charges while increasing the capacity of their links to the county (referencing specifically the municipalities participating in the dispatch system).

Alternatives

Alternatives to this project include:

1. Establish a Wide-Area Network that is T3 based. This should provide the required bandwidth for County operations but has an annual subscription fee of approximately \$150,000 for this phone line linkage. (the expected life span of the fiber solution is 25 years—with annual maintenance charges of \$5,000.
2. Forgo the Installation of the Fiber/Wireless networking solution to some future date.

Fiscal Impacts

Ongoing maintenance fees for the currently installed fiber are estimated to be \$5,000. Ongoing maintenance for the SAN environment will be \$16,000 per unit (End User Operations Technology Fund (EUOTF) impact). Managed service for the Fiber infrastructure and wireless equipment is estimated to be about \$20,000.

	<u>Amount</u>	<u>Year of Impact</u>
Estimated Operation Budget Impacts	\$0	-
Estimated EUOTF Impacts	\$37,000	2006
	\$45,000	2008
Incremental I.S. Staff Impacts	\$0	-

The following impacts have also been identified. *Cost Reductions:* Current Wide Area Network (WAN) connections can be eliminated at several county sites. *Cost Avoidance:* 8 T1 lines to support the radio tower environment will not have to be ordered and installed. *Operational Benefits:* Broadband data speeds will now be available to county facilities that cannot access broadband currently. Infrastructure is required to provide the backbone for the Shared Services model that will allow for local government to reduce the overall cost of computing by combining technical environments by sharing the cost of the new environment.

Previous Action

Approved as a new project in 2002-2006 Plan and updated in 2003.

Project #	IS-200207	Project Title:	Telecommunication Solution & Infrastructure Analysis & Upgrade
Department:	County-wide	Sponsor:	Department of Administration
Phase:	Design	Manager:	Mike Biagioli
Budget Action:	C – Scope & \$ Update	Date:	December 20, 2005, 10:04 AM

CAPITAL BUDGET SUMMARY				
Year Project Phase	2002 Study	2003 Contract Renewal	2006 Design / Switch Upgrade	Total Project
Expenditure Budget	\$50,000	\$500,000	\$250,000	\$800,000
Revenue Budget	<u>\$50,000</u>	<u>\$500,000</u>	<u>\$250,000</u>	<u>\$800,000</u>
Net County Cost	\$0	\$0	\$0	\$0
COST DOCUMENTATION		REVENUE		
Hardware/Software	\$200,000	Communications Fund		
Outsourced/Purchased Services	\$480,000	Balance Transfer		
Consulting Services	\$100,000			
Contingency	\$20,000			
Total Project Cost	\$800,000	Total Revenue		
EXPENDITURE BUDGET	\$800,000	REVENUE BUDGET		
		\$800,000		

Project Scope & Description

This project provides the funding necessary to evaluate alternatives and to provide telecommunication solution(s) for the County. The County regularly evaluates available telecommunication options. To date Centrex services, purchased on a lease basis from a third party provider, have resulted in the most cost effective and efficient telecommunication solution for the County. This capital project has provided the dollars necessary to fund the County's previous 24-month contract for Centrex services that expired on May 1, 2005 and the additional 24-month renewal agreement signed in 2005 that allows for an additional 12-month extension at the County's option.

A December 2004 study conducted by an outside consultant concluded that Voice Over Internet Protocol (VOIP) is a viable, efficient telecommunication option that should be further evaluated and considered for future implementation if the County can cost effectively upgrade its infrastructure from the existing dual wiring environment (separate data and voice) to a single dual connection that will support IP telephony. The consultant recommended Waukesha County examine and consider the replacement of its existing network data cabling infrastructure including LAN switches and routers over a period of 24-36 months as necessary to; ensure compatibility and support guidelines, and for future migration to a converged network environment. The County's existing data/voice cabling is sufficient to support our short term data/voice needs however it will not support a VOIP application or meet the County's long-term data/voice needs.

In 2006, this project provides \$50,000 of funding for an outside expert to analyze and develop a plan/design to upgrade the County's infrastructure which will allow for transition to VOIP and possible integration with Wi-Fi technology. The consultant will identify the costs and the best option for upgrading our network to add the reliability and predictable performance that VOIP requires (redundancy/uninterruptible power supply) while lowering our overall infrastructure costs and enabling us to move from constructing and maintaining our traditional two separate wiring systems (one for voice and one for data) to a single dual connection. The remaining funding of \$200,000 in 2006 is for switch and router upgrade/replacement, which is the first phase of the infrastructure upgrade as identified/recommended in the 2004 study.

Location

All County employees will benefit from these improvements.

Project #	IS-200207	Project Title:	Telecommunication Solution & Infrastructure Analysis & Upgrade
Department:	County-wide	Sponsor:	Department of Administration
Phase :	Design	Manager:	Mike Biagioli
Budget Action:	C – Scope & \$ Update	Date:	December 20, 2005, 10:04 AM

Analysis of Need

Providing telecommunication services is critical to the County's mission as is continued evaluation of the best telecommunication direction for the County. In our current telecommunications environment, all fees and service features are dependent on our contract with SBC. County staff have been successful in negotiating a reduction of our overall telecommunication costs with each renewal contract. Since these contracts are short-term to allow the County the flexibility to take advantage of evolving technologies they require frequent renegotiation at regular intervals. The proposed consultant design/plan will assist in defining and determining the most cost effective and efficient technical infrastructure to support the proper long-term telecommunication direction for the County. Replacement of the separate existing voice and data cabling with a single dual connection is expected to generate a high return on investment. This cost effective and efficient initiative is representative of the type of opportunities the County actively seeks. This Capital Project will be further funded and adjusted in 2007 to reflect the remaining funding required for implementing the selected solution.

Alternatives

Telecommunication options that will be considered for this project include:

1. Continue to purchase Centrex services from SBC or submit this telecommunication's requirement to formal bidding to other providers, including SBC. This would require replacement of our voice mail system. Pricing would be subject to competitive pricing at the time of the contract expiration.
2. Implement a VOIP technical solution. This environment would eliminate the need for separate voice and data wiring, and will require evaluation and exploration of options for replacing/upgrading our existing core and wiring closet switching and cable infrastructure to adequately prepare to meet the new infrastructure requirements of a redundant geographically diverse connectivity VOIP environment that will avoid outages. All phone handsets would be replaced and will include standard based session initiation protocol (SIP) support to allow for more nonproprietary phone options and better integration with and more choices for third-party applications. Advantages include: a single dual connection versus separate wiring for data and voice, lower maintenance costs, local call fee reduction, integration with Wi-Fi technology, improved personnel efficiency and customer service due to unified messaging, automated call management and presence capabilities. Detractions include new end-user training and increased upfront investment to ensure adequate voice/sound quality and backup power. Types of VOIP implementations to be considered include: a proprietary solution, an outsource option and/or a hybrid model with an outside provider managing a County owned and located VOIP switch.
3. Implement a combined solution using both Centrex and VOIP technologies.
4. Implement a PBX solution. All analog sets could be reused. Any proprietary equipment would need to be replaced.

Ongoing Operating Costs

1. The current Centrex Operating Costs are already known.
2. Estimated ongoing support and maintenance fees for a VOIP solution will be identified and determined in the upcoming consultant study.

Previous Action

Approved as a new project in 2002-2006 Plan. Approved as planned in 2003-2007 plan.

Project #	200414	Project Title:	Countywide Cashiering
Department:	DOA	Sponsor:	Information Systems
Phase:	Implementation	Manager:	Sean Sander
Budget Action:	C - \$ Update and Scope	Date:	12/20/2005

- Child Support

Most of these systems are centralized to the Treasurer, as the Depository for the County, and that information is input into the Business Accounting System. Many of these interfaces are manual and prone to error and other issues.

Several of these Cashiering systems are using aging technology and need to be upgraded or replaced. This project provides the funding to upgrade the existing cashiering application in the Treasurer's office. Upgrade is necessary, for a short-term stopgap solution in the Treasurer's office, as the new tax system is unable to interact with their existing desupported DOS application. This interim solution could become a long-term solution for the Treasurer and other County departments in the event it is determined from rfp responses that single cashiering vendors are unable to meet the Register of Deeds specialized needs.

This project ultimately will enable a centralized receipting function for the County. Additional to the scope of this initiative, will be the development of a full incorporation of the Countywide data warehouse as the repository of this information. In order to efficiently and adequately plan for this and to eliminate rework a consultant study is necessary. The study will analyze, develop and recommend the ideal vision for establishing the primary source of name and address information and the infrastructure and architecture to best support, share and manage this information Countywide and provide a single citizen view. The desired solution will eliminate redundant data entry and identify the optimum organizational structure to best utilize this information to: increase customer service/satisfaction, deliver integrated multi-channel citizen centric services with quicker response time, improve accuracy of information, maximize staff productivity and efficiency, minimize costs of service delivery and measure/access performance and the quality of service delivery. This study will explore the long- term benefits of initiating various levels of CRM (customer relationship management) tools/activities and the applicable return on investment to the County. This study will also include evaluating the feasibility of electronic document imaging. Vendors have indicated that combining these studies will result in cost savings for the County.

Location

Most departments within the County will be impacted by this Capital project.

Analysis of Need

A new cashiering system with the ability to record documents electronically addresses the Register of Deeds' strategic plan critical issue #1 and the County's strategic plan by increasing the use of technology to improve customer service and efficiency. As the County migrates to web-based interaction with their constituents, the requirement to provide a centralized cashiering function that accommodates e-Commerce will become more important.

Several of the current cashiering systems cannot be upgraded because of the aging technology these were developed for.

Centralizing the cashiering function will reduce manual interfaces with the County's Business Accounting System, standardize the cash handling function and allow for better management of County funds.

Alternatives

Continue handling cash and Accounts Receivable as the County currently handles them, replacing systems as they fail, and continue to manually transfer cash internally for the County.

Ongoing Operating Costs

The maintenance contract for the solution chosen is expected to be at the 15% of purchase price level. Licensing fees for additional Business Objects users would add approximately \$5,000, overall, for the County, to be allocated by user areas. Maintenance of these licenses would be approximately \$750 annually. To the extent a centralized cashiering solution is viable, cost savings from multiple vendor software maintenance costs and interfacing multiple systems can be avoided.

Previous Action

Proposed as new project in 2004-2008 plan.

Project #	IS-200624	Project Title:	Re-engineering I.T. Infrastructure
Department:	DOA-Information Systems	Sponsor:	DOA
Phase:	Analysis	Manager:	Mike Biagioli
Budget Action:	New	Date:	December 20, 2005

CAPITAL BUDGET SUMMARY				
Year	2006	2007	2008	Project
Project Phase	Analysis	Implementation	Completion	Total
Expenditure Budget	\$150,000	\$100,000	\$0	\$250,000
Revenue Budget	<u>\$150,000</u>	<u>\$100,000</u>	<u>\$0</u>	<u>\$250,000</u>
Net County Cost	\$0	\$0	\$0	\$0
COST DOCUMENTATION		REVENUE		
<u>Contract Services</u>	<u>\$250,000</u>			
Total Project Cost	\$250,000	End User Operations Technology		\$250,000
		Fund Balance		
EXPENDITURE BUDGET	\$250,000	Revenue Budget		\$250,000

Project Scope & Description

The purpose of this project is to conduct/complete an Information Technology Assessment and develop an all-encompassing Information Technology Infrastructure Plan to transition the current technology environment to the evolving business needs of the County. This plan will be used to coordinate, guide and maintain implementation and utilization of a variety of technologies for internal and external County users in the most efficient and cost effective manner possible. This initiative will deliver a basis for ensure the County will always have a four to five year view into the future for technology issues.

An RFP will be developed/issued to select an external consulting partner to:

- 1) Develop a baseline assessment report that will document, define and serve, as an inventory of the current enterprise architecture including current functions and processes, automation, information and data requirements, and application systems needed to support end users needs,
- 2) Define/document the County's Information Technology guiding principles and hardware/software standards,
- 3) Develop/recommend an enterprise approach for technology that enables the identification of duplicative resources/investments and opportunities for internal and external collaboration that will result in operational improvements and cost-effective solutions to business requirements,
- 4) Establish a Countywide roadmap/blueprint and IT master planning tool that will maximize data integration opportunities and provide a sound foundation to support the capital planning and technology investment management process,
- 5) Compare planned and future projects to the existing infrastructure and user needs/requirements to identify gaps, develop a migration strategy and a plan for realignment, if necessary
- 6) Incorporate a process for ongoing and regular updating of the plan and a continuous process improvement methodology.
- 7) Integrates the Technology Steering Committee into the business planning process for technology within the County, in a partnership with the Division of Information Technology, establishing business priorities matched to the strategic plan for Waukesha County.

Focus groups made up of critical end-users (including Technology Steering Committee members) and IT staff will be utilized to obtain input/feedback and to drive the development of the plan. Current and ongoing benchmarking against similar organizations and securing of best practice research will also be project deliverables.

After the initial completion of this Capital initiative, the ongoing maintenance of the Information Technology Plan will be the responsibility of Information Technology with guidance provided by all County departments.

Project #	IS-200624	Project Title:	Re-engineering I.T. Infrastructure
Department:	DOA-Information Systems	Sponsor:	DOA
Phase:	Analysis	Manager:	Mike Biagioli
Budget Action:	New	Date:	December 20, 2005

The Information Technology Plan will be published on the County's internal Intranet System as well as the County Internet site or reference by all County employees and the public.

Location

All internal and external users of County technologies.

Analysis of Need

1. In the year 2000 Waukesha County's computer room environment supported the following physical servers:
 - Intel-based Novell servers - 8
 - Intel-based Microsoft NT 4.0 Servers - 6
 - UNIX - IBM RS/6000 - 13
 - Data Storage - Approximately 750,000 Gigabytes

As of July 2005 the current computer room environment supports the following physical servers:

- Intel-based Novell Servers - 22
- Intel-based Microsoft NT 4.0 Servers - 2
- Intel-based Microsoft Windows 2000 Servers - 46
- Intel-based Microsoft Windows 2003 Servers - 11
- VM/Ware Virtual Servers - 2
- Intel-based LINUX Servers - 4
- UNIX - IBM RS/6000 - 24
- Citrix Servers - 14
- Data Storage (DAS and SAN) - Approximately 14.2 Terrabytes

This growth, all from the implementation of business systems and applications with defined and appropriate business value, has dramatically impacted staff requirements to support this environment. Without a documented Information Technology Enterprise Architecture and plan for the future, this is anticipated to grow in complexity at a minimum of the same pace. Departments across the County are seeing the impacts of this in both their Operating and End User Operations Technology Fund charge backs.

2. The establishment of a true Information Technology plan for Waukesha County will allow the Division of Information Technology and the business areas they support to clearly make strategic decisions, for the County, based on pre-established strategies and yet allow for variations dictated by evolving technologies. The ongoing, availability and use of an Information Technology Plan will allow for emerging technologies to be incorporated into the overall plan for the County, while allowing current efforts to be delivered under established standards.
3. Clearly matching the technology requirements for Waukesha County to the overall Strategic Plan for the County will insure that the dollars spent on technology are focused on the areas where the most business value will be returned, while still allowing for the delivery of systems that are deemed as mandates.
4. Establishing a short (9-12 months) and long term (5 years and beyond) window for technology will keep the focus on the long term business goals of technology for the County, while allowing the evolution of technology to be reflected and incorporated in the overall plans for the County in a measured and planned approach.
5. The delivery of this over-arching architecture and plan will maximize county employee productivity, through the delivery of business systems and applications that are focused on the business value of the solution.

Alternatives

Alternatives to this project include:

1. Defer technology initiatives that are deemed to have a significant impact on the current Information Technology Infrastructure, incorporating on those initiatives that can be absorbed by the current environment.
2. Continue to use the existing priority setting processes.

Fiscal Impacts

Maintaining the ongoing Information Technology Plan, including future efforts, will be the responsibility of the Manager of Information Technology with input from the Technology Steering Committee and end-user County departments and funding as needed for outside expertise is expected.

Previous Action

None

Project #	IS-200621	Project Title:	Consolidation Of Network Operating Systems
Department:	DOA-Information Systems	Sponsor:	DOA
Phase:	Analysis	Manager:	Mike Biagioli
Budget Action:	New	Date:	1/6/2006

CAPITAL BUDGET SUMMARY				
Year	2006	2007	2008	Total
Project Phase	Analysis	Implementation		Project
Expenditure Budget	\$105,000	\$530,000	\$0	\$635,000
Revenue Budget	\$0	\$0	\$0	\$0
Net County Cost	\$105,000	\$530,000	\$0	\$635,000
COST DOCUMENTATION		REVENUE		
Consulting/Contracting Services		\$205,000		
Consulting Contingency		\$15,000		
Hardware/Software		\$360,000		
Hardware Contingency		\$55,000		
Total Project Cost		\$635,000	Total Revenue	\$0
EXPENDITURE BUDGET		\$635,000	REVENUE BUDGET	\$0

Project Scope & Description

Waukesha County has a multiple Network Operating System Environment (NOS) structure for its Intel-based server environment. In the past, this has served the county well, but is now creating complexities and support issues that dictate that a strategic move to a single NOS environment be established. This will reduce the complexity of the overall system support area, allow for more focus of our Systems Administrators, give the county more flexibility in the allocation of those valuable county employees, and dramatically reduce the complexity of our technical environment.

The first deliverable for this Capital initiative will be to develop a detailed Return on Investment analysis. This initiative should not proceed unless there is measurable and realistic return on the dollars to be invested. The business benefits to our technical environment need to be evaluated against the cost of implementing this change.

If the Return on Investment indicates that the initiative should proceed. The next phase of the effort will commence.

Since the county will need to completely revamp its email environment, as part of this initiative, a staged implementation of the technology only makes sense for the county. Careful planning, for the migration of our existing emails, will be required. A selection of an industry standard email archiving system will be incorporated into this project. This will insure that emails, subject to open records requests can be moved to an archive, off the main email server environment, but easily recovered when needed.

The system, the county currently uses, to automatically load upgrades and applications to networked PCs will have to be replaced. The overall file structure for the county will be migrated to the Microsoft Active Directory architecture.

This all needs to be accomplished with no interruption to normal county automated processing or function.

As part of this initiative, all county employees, using the county email system, will have to be fully trained on the use of the new email system as well as the use of the selected archiving tool.

Location

All departments using the county server and email system

Project #	IS-200621	Project Title:	Consolidation Of Network Operating Systems
Department:	DOA-Information Systems	Sponsor:	DOA
Phase:	Analysis	Manager:	Mike Biagioli
Budget Action:	New	Date:	1/6/2006

Analysis of Need

1. As a long time user of the Novell Network Operating System, Waukesha County has reaped many technical benefits, but as our technical environment has grown in complexity, the need to reduce the overall complexity has become more and more of a reality.
2. The focus of Novell on offering that does not align well with the County's current and future technical strategies has made the move to a single NOS more and more compelling. The Technology marketplace has also recognized the dominance of Microsoft, so that third party product for Novell is just not entering the marketplace, and our need for those third party products is growing.
3. Waukesha County has significant investment in both Microsoft's Network Operating System as well as Novell's Network Operating System, not the least of which is the full-time staff that is required to support both Operating System environments. By migrating to a single NOS, Waukesha County will gain dramatic flexibility in the assignment of these highly talented and skilled employees, giving the county much greater flexibility with staff, and provided a definite succession path for technical staff within the division.
4. Email administration needs definite attention. Moving to a single NOS, and migrating to the Microsoft email environment will allow the county to use third party products to facilitate this administration requirement.

Alternatives

Alternatives to this project include:

1. Continue the support of both Network Operating Systems; establish a method to cope with the technical complexities that will remain a growing issue.
2. Evaluate the viability of Outsourcing the NOS administration (including the physical plant).

Fiscal Impacts

There will be some maintenance savings from the removal of the Novell NOS environment; those will be offset by the new maintenance costs for Microsoft. It is anticipated that overall there will be an increase to End User Operations Technology Fund (EUOTF) for maintenance fees. The Analysis conducted in 2006 would detail the fiscal impacts to the EUOTF, and identify the assumed Return on Investment to the county before pursuing the migration.

Previous Action

None